

WISCONSIN TRAFFIC SAFETY REPORTER

Vol. 6, No. 3
2003

We need your help!

by Mark Wolfram
Administrator, WisDOT Division of
Transportation Investment
Management

There is a serious situation arising on Wisconsin's highways. Fatalities are increasing at an alarming pace. This year's toll from motor vehicle crashes is already over 500. Almost twice as many motorcyclists have been killed in crashes this year as last. At this pace, more than 900 people will die this year. This is not acceptable!

How do we stop this carnage? It's no secret. We've talked about it over and over for years. We need your assistance getting motorists to slow down, buckle up, and not drive drunk.

If the people dying in traffic crashes this year were, instead, victims of a new disease like SARS or of an airplane crash, the public would demand to know what measures were being taken to prevent more people from dying. But there is no similar public outcry when we note traffic deaths. It seems society has acknowledged that people will die in motor vehicle crashes as if it is an acceptable consequence of our lifestyles. But no one would find this complacent acceptance appropriate if they had to inform a family of the loss of a loved one to a drunk or speeding driver.

We need to tell motorists that it is not acceptable to speed, drive drunk or fail to buckle up. Innocent people have been killed and seriously injured by these thoughtless actions. Drivers need to take responsibility for their actions if we are to prevent this carnage. We encourage your input for innovative ideas that will help us change motorists' behavior, so fewer people die on our highways.

Contact Don Hagen, WisDOT-BOTS,
at (608) 267-7520 or
don.hagen@dot.state.wi.us.

Fatality trend takes a wrong turn

by Timothy McClain, AICP
Safety Policy Analyst, WisDOT

Highway safety in Wisconsin is a mixed story of personal tragedies, historic events and heroic interventions. Over the last half-century, different policies, issues and events have had an influence. Figure 1 shows Wisconsin traffic deaths and total travel for 1945-2002, noting significant traffic safety-related events.

The good news is that, over the long run, Wisconsin has made great strides in traffic safety. Some examples include:

- Technology improvements such as air bags, radial tires, anti-lock brakes and better safety belts have made vehicles easier to control and safer to operate. The injury rate has plummeted since the 1970's, due in large part to improvements in car safety features.
- Roadway design, such as on the Interstate and other freeways – with wide medians and roadsides clear of trees and obstacles – make roads more forgiving to driver error and inclement weather.
- Emergency Medical Services; since the late 1960s, improved medical response and trauma care have saved many lives.
- Tougher impaired driving laws and mandatory safety belt laws have helped reduce crashes and fatalities.
- Public information and education campaigns have raised awareness of key highway safety issues.

As a result, Wisconsin's transportation system has become one of the safest in the United States. From 1985-2002, our

continued on page 2

Motorcyclist fatalities up sharply

Bad news nationally, and bad news close to home. Between 1997 and 2001 in the United States, motorcycle fatalities rose 50.3% (see Figure 5). In Wisconsin the death toll rose from 47 in 1995 to 82 last year (of which four were on mopeds), and so far this year the toll has gotten even worse; 66 motorcyclists had died as of August 4 (see Figure 6).

The number of registered motorcycles is climbing (see Figure 7), partly because of aging baby boomers with disposable income for recreational pursuits. National figures show that from 2001 to 2002 fatalities for those under 30 years old decreased by 6.6% but for those over age 40 they increased by 14.8% (see Figure 8). This is consistent with the long-term trend.

continued on page 3

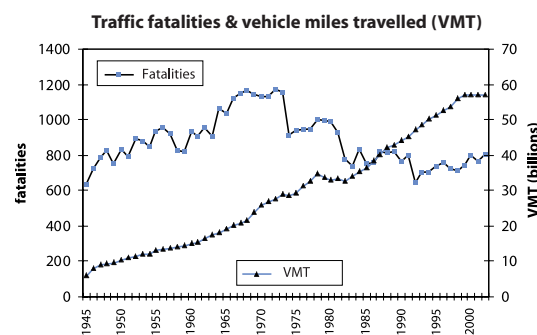


Figure 1
Source: WisDOT

The annual death toll increased during the 1950s and 60s, peaking at 1,168 fatalities in 1972. This was followed by a sharp decline in 1974, which saw a new national 55 mph maximum speed limit, an oil embargo and the beginning of a recession. Another sharp drop occurred in 1982, the first year of Wisconsin's tougher drunk driving law and the start of another recession that led to a brief decline in travel. Another decline in 1992 coincided with the coolest summer on record and passage of laws that created new penalties and treatment opportunities for repeat drunk drivers.



fatality crash site
in Dane County

Fatality trend takes a wrong turn from page 1

motor vehicle fatality rate decreased 32% (see Figure 2). Wisconsin's fatality rate is consistently below the national average.

But we have much farther to go. In 2002, 805 people were killed (see Figure 3) and 5,880 were seriously injured on Wisconsin's highways. If these numbers continue to repeat themselves, in ten years we will have lost over 8,000 people. That is equivalent to losing the entire population of a small city in Wisconsin every ten years, and this doesn't even include the estimated 580,000 people that would be seriously injured!

So far in 2003, fatalities are well above average and we're on pace to exceed 900 by year's end. Figure 4 shows fatalities by month for 2003 compared to the ten-year monthly average.

Why have there been so many fatalities in 2003? Increased fatalities among motorcyclists are part of the reason (see page 1). In addition, there have been more fatalities on rural

Interstate highways compared to the previous year. This can partially be attributed to speeding and slightly more traffic on these highways during the first four months of 2003. Typically, each year 'the big 3' contributing factors are: not buckling up (see pages 4, 5), impaired driving (see pages 5, 7) and speeding (see page 7). For example, in fatal crashes in 2002, 36% involved alcohol and 31% involved speed. This is compounded by the fact

Traffic fatalities per 100 million VMT

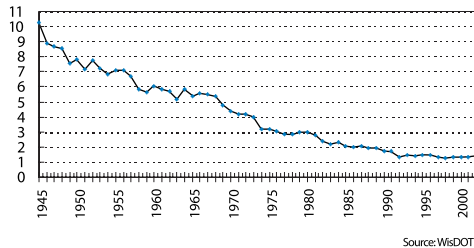


Figure 2

Traffic fatalities in Wisconsin

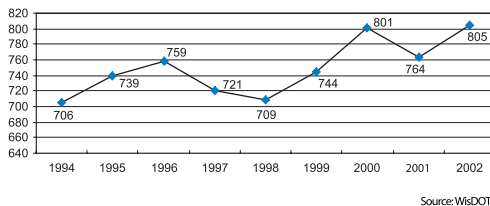


Figure 3

Monthly fatalities in Wisconsin
2003 compared to 10-year average

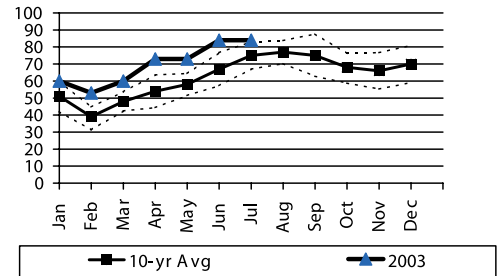


Figure 4

Source: WisDOT

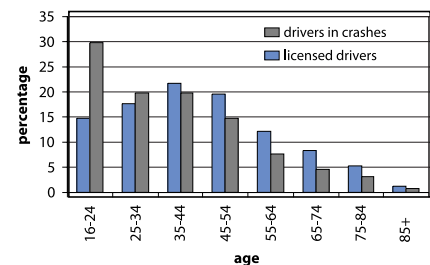
that only 69.8% of motorists are wearing safety belts according to the latest WisDOT survey.

Crashes not only cause fatalities and injuries; they also incur huge social and economic losses. These include medical, property and insurance costs and lost productivity.

We face serious challenges, and the commitment to reducing crashes, deaths and injuries continues to be one of WisDOT's top priorities.

Contact Tim McClain at (608) 267-5136 or timothy.mcclain@dot.state.wi.us.

Drivers in crashes & licensed drivers (2001)



Source: WisDOT

Drivers under age 25 account for a disproportionate share of crashes.



The **Wisconsin Traffic Safety Reporter** is published by the Bureau of Transportation Safety, Wisconsin Department of Transportation. Its purpose is to promote transportation safety, to recognize worthwhile programs, to educate and to share ideas with safety professionals.

WisDOT SECRETARY
Frank Busalacchi

TSR COORDINATOR
Don Hagen

Comments/questions
are invited:
(608) 267-7520
don.hagen@dot.state.wi.us

Editor
John Jordan

Bureau of Transportation Safety
P.O. Box 7936, Madison, WI 53707
Funded by WisDOT and the National Highway Traffic Safety Administration.

Get to know ...

Jim Savage

EMS / Occupant Protection Program Manager
WisDOT-Bureau of Transportation Safety



Although recently rejoining the BOTS staff, Jim has worked with the office since 1992. In his first job after college he was bicycle and pedestrian safety coordinator for the Eau Claire Police Department, a BOTS-funded position. He then became a BOTS Regional Program Manager for the north central region. In 1997 he became director of the Wisconsin SAFE KIDS Coalition, and later was director of field operations for the International Center for Injury Prevention. He returned to BOTS in December 2002.

Jim has served with many safety-related organizations, including Wisconsin Traffic and Safety Officers, Wisconsin Child Passenger Safety Association, Great Lakes Injury Prevention Council, National SAFE KIDS Advisory Board and the Portage County Child Passenger Safety Association. He was a director of the Ford Motor Company's Boost America! national campaign, which distributed one million child booster seats and provided training to child passenger safety advocates. In all, his traffic safety activities have taken him to 43 states. He was one of the first instructors for the Child Passenger Technician Certification course in Wisconsin, leading the way for the training of over 1,000 CPS technicians.

As injury prevention program manager, Jim oversees federally-funded occupant protection and EMS projects. He sees increasing safety belt use statewide as his main goal at BOTS.

Contact Jim at (608) 266-1972 or james.savage@dot.state.wi.us.

Motorcyclist fatalities

from page 1

Another pronounced nationwide trend is that increasingly those killed were riding larger motorcycles (see Figure 9). Data also shows that riders on cycles with relatively large engines (1,001-1,500 cc) had the highest alcohol involvement (44%) among all the engine-size groups. Figure 10 shows the BAC (blood alcohol concentration) of riders in fatal crashes by age group.

Many motorcyclist deaths could be avoided

- if other drivers watched more carefully for cyclists and gave them equal rights on the road;
- if all cyclists took operator training, wore all the proper protective gear, and rode sober.

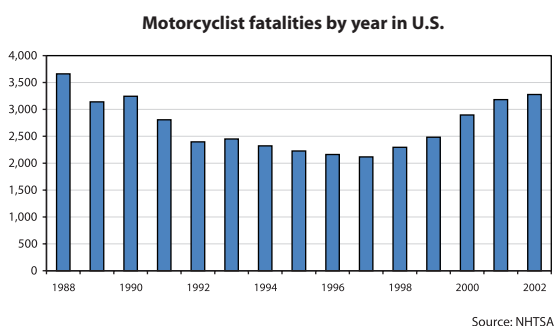


Figure 5

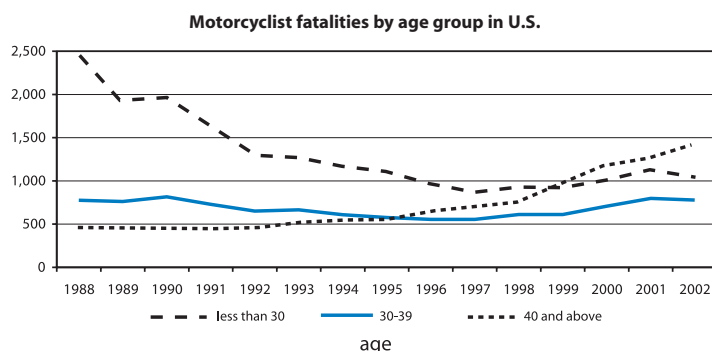


Figure 8

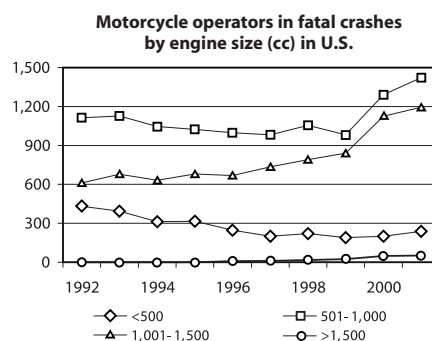


Figure 9

Wisconsin motorcyclist fatalities

	1995	1996	1997	1998	1999	2000	2001	2002	9-Yr Avg	2003
Jan	0	0	0	0	0	0	0	1	0.1	1
Feb	0	0	1	0	1	1	0	0	0.3	0
Mar	3	0	0	1	3	6	1	0	1.6	1
Apr	3	1	1	4	6	4	8	4	4.2	12
May	6	7	7	8	8	8	5	3	6.4	15
June	14	8	13	8	9	13	12	20	12.3	22
July	4	9	10	12	10	16	14	13	11.3	15
Aug	9	14	15	10	11	10	11	9	10.8	
Sept	3	5	11	12	9	16	14	13	9.8	
Oct	5	5	5	8	5	3	1	9	4.8	
Nov	0	0	0	1	3	1	4	6	1.8	
Dec	0	1	0	1	0	0	0	0	0.2	
TOTAL	47	50	63	65	65	78	70	78	63.7	66

**As of 8/4/03

Figure 6

Source: WisDOT

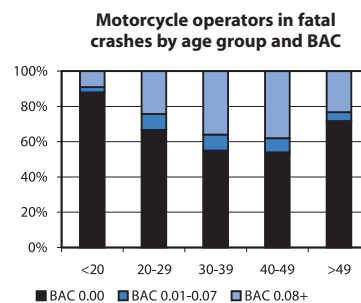


Figure 10

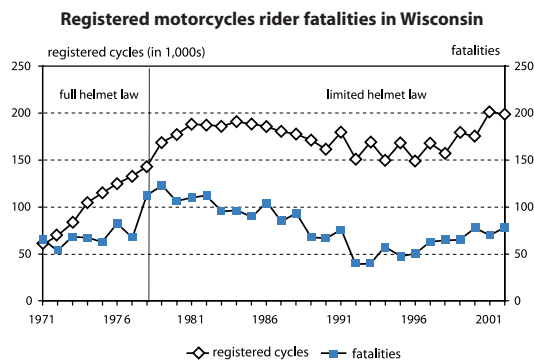


Figure 7

Helmets are the most important piece of safety gear, but roughly 80% of people in fatal crashes weren't wearing one, and in a statewide survey helmet use was only 41%. To see how helmet and alcohol use affects the chances of traumatic brain injury in a crash, see article on page 4.

The most effective tool in protecting riders is education. In cooperation with the technical college system, WisDOT-BOTS runs the Wisconsin Motorcycle Rider Education program. In 2002 alone, 23 new instructors were trained and over 6,000 riders received instruction. Because of high demand, there is a waiting list at some sites.

Contact Ron Thompson, WisDOT-BOTS, at (608) 266-7855 or ron.thompson@dot.state.wi.us.



Buckling up ...

we could be doing a better job.

"Seat belts are absolutely our most effective safety device", says Norman Mineta, U.S. Transportation Secretary, but a recent survey found that only 69.8% of Wisconsin motorists were buckled up, well below the 75% national average.

See Figure 11 for Wisconsin use rates by age group. For all male occupants (drivers and passengers), use was 62.1%, and for females 75.2%. Use rates by vehicle type: passenger cars, 71.0%; SUVs, 72.5%; vans, 75.5%; and pickup trucks, a mere 51.8%.

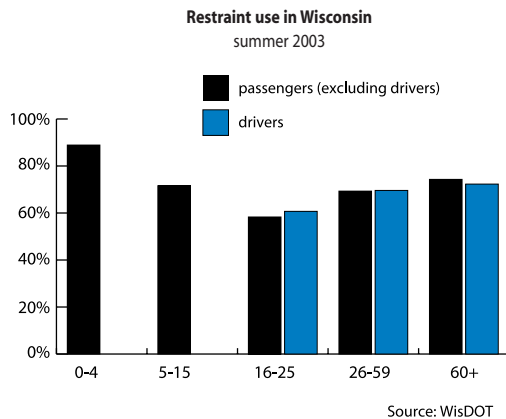


Figure 11



crash test dummy shares safety belt message

In 1987, when Wisconsin's mandatory adult safety belt law went into effect, rates jumped from about 25% to 55%. This law allows for secondary enforcement; an officer must stop a vehicle for another violation before a belt use citation can be issued. In states that allow for standard enforcement, motorists can be stopped solely for not buckling up.

When states upgrade from secondary to standard enforcement, use rates increase an average 10-15%, and, according to a NHTSA study, traffic fatalities decline by more than 20%.

Wisconsin recognizes crash survivors who were buckled up with a certificate and t-shirt through the Saved by the Belt Club, and a Crash Survivor of the Year is chosen from entries submitted by law enforcement.

The life-or-death difference a safety belt can make is illustrated in the story on page 8.

motorcycle crashes

How alcohol & helmet use affect your chances

Of all motorcyclists involved in crashes in Wisconsin, 1991-1998, the two graphs at the bottom of the page show what percent suffered traumatic brain injury depending on alcohol and helmet use. Clearly, being sober and wearing a helmet improves your chances.

This data is provided by the Wisconsin CODES Data Linkage Project, which receives funding support from WisDOT-BOTS. CODES (Crash Outcome Data Evaluation System) is a multi-agency collaboration designed to provide medical and financial information on the outcome of motor vehicle crashes; probabilistic software is used to link hospital discharge data with crash data. Wisconsin is one of 20 states involved in the national CODES project.

(Editor's note: The October 1999 issue of this newsletter reported on CODES data regarding safety belt use. The data showed that people who don't buckle up are 4.2 times more likely to be killed in crashes than people who are buckled up, and 3.9 times as likely to suffer serious brain injury. For back issues, visit the WisDOT website at www.dot.wisconsin.gov and click on "Safety & Consumer Protection".)

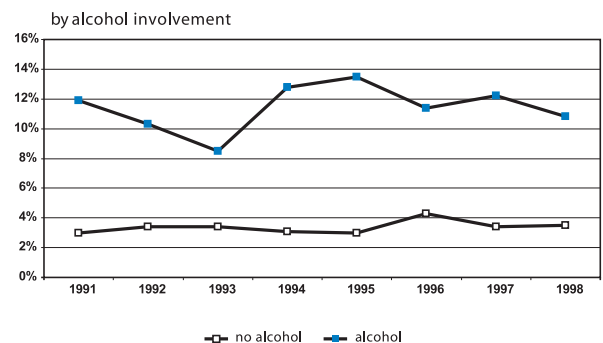
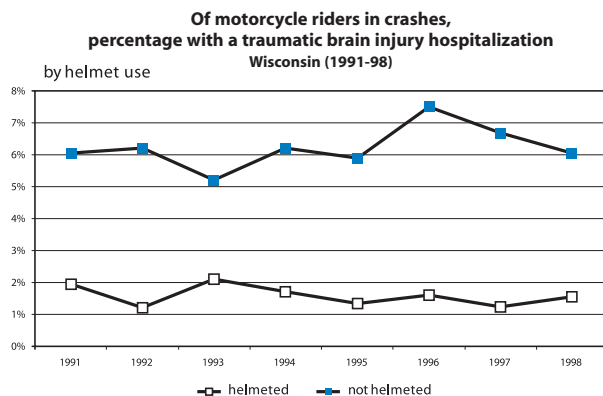
Not surprisingly, motorcyclists are much more likely to be injured in a crash than people in cars.

	hospitalizations per 100,000 people in police-reported crashes Wisconsin, 1996-97	fatalities
motorcycles	164.1	26.0
passenger vehicles	10.6	1.9

Source: CODES

In analyzing the health outcomes of motorcycle crashes, the CODES study considered alcohol and helmet use along with other factors such as demographics (e.g., age, gender, rural/urban) and crash characteristics (e.g., multiple vehicle, motorcycle only).

Visit www.chsra.wisc.edu/codes/.



Source: CODES



In May, 81 local and county law enforcement agencies, along with the State Patrol, participated in the *BUCKLE UP Or Pay the Price* mobilization, with two weeks of stepped up traffic enforcement along with a safety belt media campaign.

Participating agencies conducted "earned media" events such as news conferences and media interviews, and NHTSA-funded public service announcements were aired; "Buckle Up or Pay the Price" radio PSAs aired about 6,000 times.

During the mobilization, traffic officers issued:

	citations	warnings
safety belt	3,785	291
speed	1,984	3,194

Source: WisDOT

Another mobilization is planned for November.

Contact Jim Savage, WisDOT-BOTS, at (608) 266-1972 or james.savage@dot.state.wi.us.

Wisconsin joins national drunk driving crackdown

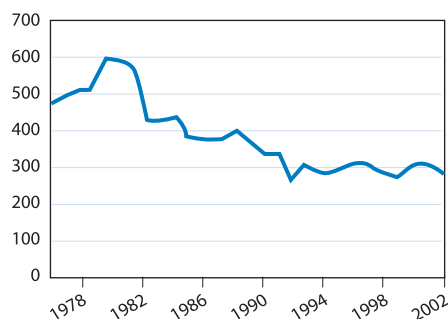
Early this summer, law enforcement agencies statewide concentrated on getting drunks off the roads as part of the *You Drink & Drive. You Lose* campaign. The National Alcohol Mobilization began in June, just before the busy 4th of July holiday, with local and state public information and education events, which peaked on June 27 when saturation deployments began.



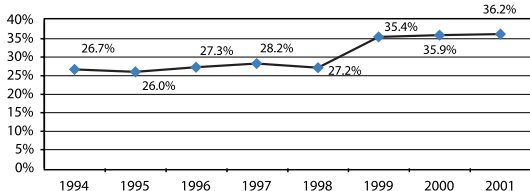
During a press conference in Madison, officers formed a visual "circle of caring" to demonstrate their unified effort. With more than two thirds of the agencies reporting, 305 impaired drivers were arrested and 327 were cited for operating after revocation or suspension.

Contact Mary Miller, WisDOT-BOTS, at (608) 267-3155 or mary.miller@dot.state.wi.us

Alcohol-related fatalities in Wisconsin

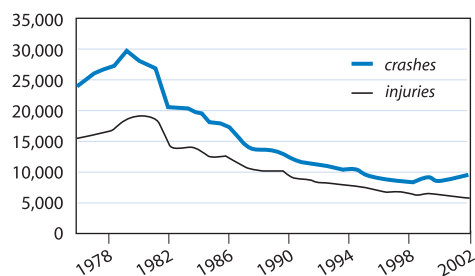


Repeat alcohol offenders as a percent of all alcohol offenders in Wisconsin



Source: WisDOT

Alcohol-related crashes & injuries in Wisconsin



Source: WisDOT

Highway Safety Partners

This section profiles people who are helping improve traffic safety in Wisconsin.



John Alley

*WisDOT-DMV Bureau of Driver Services
Legislative Liaison and Policy Analyst*

John works on evolving traffic safety issues related to driver licensing. He works closely with WisDOT leadership and legislators to help shape Wisconsin's

driving laws and rules and to address legislative constituent concerns on a short and long-term basis. He believes the biggest challenge in his work is to help develop laws and rules that save lives, are sound public policy, and are cost efficient to implement and administer. Projects he's involved with include: Graduated Driver Licensing, the federal repeat impaired driving laws, the U.S.A. Patriot Act, and the Motor Carrier Safety Improvement Act.

Until recently, he directed the Wisconsin Traffic Safety School / Impaired Driving Education programs. Working in this capacity he was a founding member, and in 2002 elected president, of the National Organization of State Impaired Driving Programs. This group develops best practices and resolves reciprocity issues among states relating to the post-conviction requirements for impaired drivers.

In addition, John is on the faculty of Madison Area Technical College where he works with underage alcohol offenders and provides alcohol beverage server pre-licensing law classes. He feels rewarded to work on direct and indirect efforts to save lives on Wisconsin's roadways.

Contact John at (608) 266-0614 or john.alley@dot.state.wi.us.

Superintendent David Collins



Wisconsin State Patrol

From 1980 to 1985, David was enforcing traffic laws as a State Patrol trooper, and, in January 2003, he returned to the State Patrol as superintendent to lead its statewide highway safety efforts.

Between his days as a trooper and his return as superintendent, he worked as a special agent for the Wisconsin Department of Justice, Division of Criminal Investigation (DCI). In 1995, he was promoted to director of the DCI White Collar Crimes Bureau

A native of Ettrick, Collins began his law enforcement career in 1979 at age 19 as a Trempealeau County deputy sheriff. He joined the State Patrol in 1980 and graduated from the State Patrol Academy at Fort McCoy. He also is a graduate of the FBI National Academy.

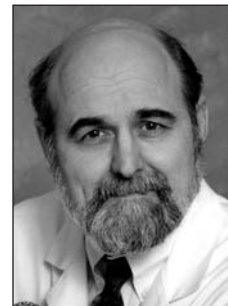
Throughout his career, the new superintendent has built solid working relationships with numerous law enforcement agencies. As part of highway safety campaigns, he has participated in news conferences, public service announcements and other public education activities.

As superintendent, his top priority is reducing Wisconsin's traffic fatality rate. "We will use all of our professional experience and resources to get motorists to slow down, buckle up and driver sober. In addition to our enforcement efforts, our expertise in motor-carrier safety inspections, crash reconstruction, and breath-alcohol chemical testing contributes to our statewide highway safety mission. In comparison to other states, we are a small state patrol, but we produce big results."

Contact David at (608) 266-0454 or david.collins@dot.state.wi.us.

Stephen Hargarten, MD, MPH

The director of the Injury Research Center (IRC) at the Medical College of Wisconsin, Steve is also professor and chairman of the Department of Emergency Medicine. He has been an injury control researcher and practitioner for over 15 years. One of the first



graduates of the Johns Hopkins School of Public Health to concentrate on injury, his injury-related activities include injury surveillance, firearm injuries, injury in travelers, and trauma system development.

Supported by a grant from the U.S. Department of

Health and Human Services, Centers for Disease Control and Prevention, the IRC conducts research and uses the findings to develop strategies to reduce fatalities and injuries, including in automobile crashes. The study of real-world crashes, for example, helps improve the treatment of crash trauma patients. The Center is part of a nationwide network of such CDC-funded centers.

Steve also has a long history of involvement in public policy advocacy for injury control. He previously served as co-chair of Advocates for Highway and Auto Safety and as chair of the State Medical Society's Injury Prevention Committee. He currently serves on Senator Russ Feingold's Regional Health Care Advisory Committee and is president-elect of the National Association of Injury Control Research Centers. He has served as chair of the Wisconsin Seat Belt Coalition and has devoted considerable effort towards seat belt legislation in this state.

Visit www.mcw.edu/irc/ and contact Steve at hargart@mcw.edu.

Wisconsin enacts 0.08 law

On July 3, Wisconsin became the 43rd state to enact a 0.08 law for first offense impaired driving when Governor Doyle signed 2003 Wisconsin Act 30 into law. This brought Wisconsin into conformity with federal criteria to avoid withholding highway aids in 2004. It should also help the state meet eligibility criteria for federal incentive grant funding. The new 0.08 standard, which takes effect September 30, 2003, also applies to operators of ATVs, snowmobiles and motorboats.

The new law exempts offenders between 0.08 and 0.10 from paying the normal surcharges associated with OWI convictions and from the AODA assessment and associated driver safety improvement plan requirement if convicted of the Prohibited Alcohol Concentration citation. If convicted of an OWI citation, individuals convicted between 0.08 and 0.10 face the same penalties as those convicted at 0.10 and above.

Further information will be available on the WisDOT website at www.dot.wisconsin.gov/safety/index.htm.

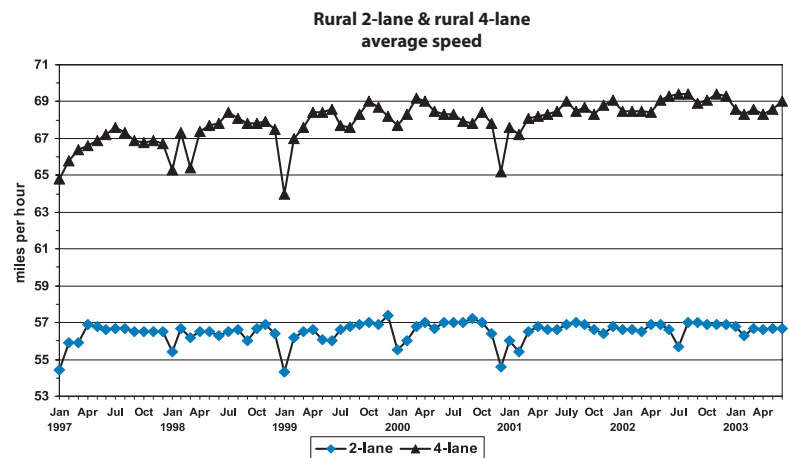
Winning the hearts & minds of young males

21-34 year-old men are in more alcohol-related crashes than any other group, and a BOTS project coordinated by a UW-Madison School of Business professor is testing whether social marketing techniques—providing incentives in order to influence behavior—can help reduce the problem.

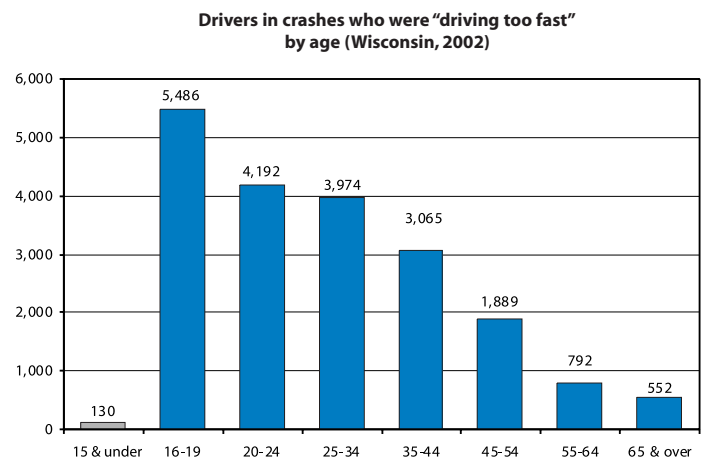
First, focus groups were conducted, and Professor Mike Rothschild notes that, along with many other insights, "they said that if you want us to take a ride home, then you'd better find a way to get us to the bar too, because once we have our cars at the bar, we're going to drive them home." With a discretionary grant from NHTSA and support from the Miller Brewing Company, a pilot project is being conducted in three Wisconsin communities. For a nominal fee, drinkers can get a ride to bars and then back home at the end of the night.

Bars in Wisconsin that participate in the SafeRide program use a different approach; patrons get a one-way taxi ride home, but then the next day must retrieve their cars on their own.

Initial results are promising, and Rothschild will present project findings at the Governor's Conference on Highway Safety, August 21-22 in Appleton.



Average speeds on rural 4-lane roads have been creeping upward, while on rural 2-lane roads they have been relatively flat. The last two winters were unseasonably mild, and we did not see the typical mid-winter decrease in average speeds on the rural 4-lane system.



In 2002, there were 129,072 traffic crashes, up 3% from 2001. 16% were speed-related, resulting in 270 deaths and 11,461 injuries, 1,499 of which were incapacitating.

2 seconds before the crash

Mary Reinhart, 17, was the only one to walk away from the December 2, 2002 crash near Sun Prairie that killed her boyfriend, Matt Hottmann, and two other friends, Jeremy Budahn and Kyle Smith. About two seconds before the crash, she clicked in her safety belt. Her friends weren't buckled up, and when their Honda Civic left the road at 70 mph and rolled they were ejected and killed.

Matt had been drinking, and before they got in the car he suggested that someone else drive. But by a fateful chance Mary had paused to chat with a friend, and when she turned back Matt was behind the wheel.

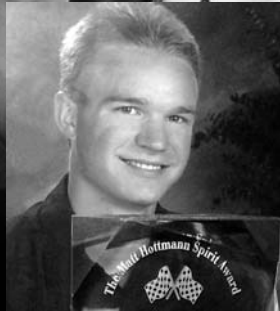
Later, as they tried to catch up to a suicidal friend's car, a police car began to follow them. Because they had open beer cans they tried to elude him, sometimes reaching speeds over 100 mph. Approaching a sharp curve, she made a life-saving decision, "I clicked the seatbelt in, and then he tried taking the curve. It was too sharp, he was going too fast."

Mary now does school presentations to share with students the life-or-death difference a safety belt can make.

Contact Mary at Thankful808285@aol.com.



Mary Reinhart



Matt Hottmann



Kyle Smith



Jeremy Budahn

Wisconsin Department of Transportation
Bureau of Transportation Safety
P.O. Box 7936
Madison, WI 53707-7936